

Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE
100%

Practice Quiz: For Loops

TOTAL POINTS 4

1. Fill in the blanks to make the factorial function return the factorial of n. Then, print the first 10 factorials (from 0 to 9) with the corresponding number. Remember that the factorial of a number is defined as the product of an integer and all integers before it. For example, the factorial of five (5!) is equal to $1*2*3*4*5=120$. Also recall that the factorial of zero (0!) is equal to 1.

1 / 1 point

```
1 def factorial(n):
2     result = 1
3     for x in range(1, 1+n):
4         result = result * x
5     return result
6
7 for n in range(10):
8     print(n, factorial(n))
9
```

Run

Reset

```
0 1
1 1
2 2
3 6
4 24
5 120
6 720
7 5040
8 40320
9 362880
```



Correct

Great work! The pieces of code you're tackling keep getting more complex, you're doing a great job!

2. Write a script that prints the first 10 cube numbers ($x**3$), starting with $x=1$ and ending with $x=10$.

1 / 1 point

```
1
2 for x in range(1,11):
3     cube = x*x*x
4     print(cube)
```

Run

Reset

```
1
8
27
64
125
216
343
512
729
1000
```



Correct

You nailed it! You got the code to print the first 10 cubes.

3. Write a script that prints the multiples of 7 between 0 and 100. Print one multiple per line and avoid printing any numbers that aren't multiples of 7. Remember that 0 is also a multiple of 7.

1 / 1 point

```
1 m = 0
2
3 for i in range(0,101, 7):
4
5     print(i)
6
7
8
```

Run

Reset

```
0
7
14
21
28
35
42
49
56
63
70
77
84
91
98
```



Correct

Awesome! You're getting Python to do all the work for you.

4. The `retry` function tries to execute an operation that might fail, it retries the operation for a number of attempts. Currently the code will keep executing the function even if it succeeds. Modify the code so that it stops trying after the operation succeeded.

```
1 def retry(operation, attempts):
2     #attempts = 1
3     for n in range(attempts):
4         #attempts += 1 #attempts
5         if operation():
6             print("Attempt " + str(n) + " succeeded")
7             break
8         else:
9             print("Attempt " + str(n) + " failed")
10
11 retry(create_user, 3)
12 retry(stop_service, 5)
```

Run

Reset

```
Attempt 0 failed
Attempt 1 failed
Attempt 2 succeeded
Attempt 0 succeeded
Attempt 0 failed
Attempt 1 failed
Attempt 2 failed
Attempt 3 succeeded
None
```



Correct

Well done, you! You've fixed the code to stop executing once the function is successful.